Simulating the Spatial-Temporal Patterns of Anthropogenic Climate Change
A Workshop in the Bridging Disciplines, Bridging Scale Series

Supported by the
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Coordinated by Todd Ringler, Sara Rauscher, Noah Diffenbaugh and Bill Collins
Dates: August 3-5, 2011
Location: Inn and Spa at Loretto in Santa Fe, NM (http://www.innatloretto.com/)

Global and regional climate models have been important tools used to understand the environmental impacts of anthropogenic climate change. Now these same models are faced with a new and significantly more complicated mission: provide information of sufficient precision and resolution to support the wide spectrum of policy initiatives that will be developed to address anthropogenic climate change. This workshop will focus on the continuing challenge of simulating climate processes at the regional scale.

New advances in our ability to simulate regional climate have been achieved since meeting in the summer of 2009. Grand challenge, ultra-high resolution global climate simulations have been performed, new variable-resolution approaches are being tested, new multi-model ensembles using limited-area models have been generated and comprehensive regional earth system models have been created. The purpose of this workshop is bring together a broad cross section of these various modeling communities in order gain a better perspective for the prospects of regional climate simulation. The success of this current workshop will be measured by its ability to engage the broad community in an ongoing evaluation of the various approaches to regional climate simulation.

We invite presentations that compare, contrast and/or rigorously evaluate one or more of the approaches to regional atmosphere and ocean simulation. Informal proposals for how these various approaches should be evaluated are encouraged. Also, we seek presentations that are prospective in order to engender substantive discussion.

An outcome of the workshop in 2009 is the ongoing development of a hierarchical framework to compare these various approaches to regional climate simulation in idealized no-physics, idealized full-physics and real-world settings. This nascent evaluation framework will serve as one starting point for the engagement of the broader community in the evaluation process.

We hope that you will be able to join us for this workshop in Santa Fe. Please feel free to follow up with any questions you might have. We would appreciate your response to this invitation by April 4, 2011. We will solicit abstracts for presentations in early May.